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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,917	12/22/2000	Antonietta Grasso	D/A0034	3973

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EXAMINER
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NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 01/22/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/746,917

Applicant(s)

GRASSO ET AL.

Examiner

Cindy Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 13, 15-24, 26, 28 and 30-36 is/are rejected.
- 7) ☒ Claim(s) 10, 12, 14, 25, 27 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

This is in response to application filed on December 22, 2000 in which claims 1-36 are presented for examination.

### **1. *Information Disclosure Statement***

The information disclosure statement filed on 12/22/00 and 11/13/03 are in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Because it has been placed in the application file, and the information referred to therein has been considered as to the merits.

### **2. *Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 13, 16, 1824, 26, 28, 30-33, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. (U.S 5754939) (Herz) in view of Chan et al. (U.S 6378070) (Chan).

Regarding claims 1 and 16, Herz discloses: A system and method for providing item recommendations, comprising: a memory (col. 56, lines 30-49, Herz); a processor, for storing ratings of items and for generating recommendations for new items based on recommendation criteria (col. 47, lines 1-5, Herz); wherein, responsive to the user request, the processor stores an implicit rating for the requested item in the memory (col. 50, lines 15-41, Herz), determines whether, based on the implicit rating and the recommendation criteria, to generate an item

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recommendation, and if the criteria for generating a recommendation is met, generates a recommendation of a new item (col. 55, lines 43 to col. 56, lines 12, Herz).

However, Herz didn't disclose: a device, responsive to a user request, for recording an item on a hardcopy medium. On the other hand, Chan discloses: a device, responsive to a user request, for recording an item on a hardcopy medium (col. 6, lines 14-28, Chan). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include a device, responsive to a user request, for recording an item on a hardcopy medium in the system of Herz as taught by Chan. The motivation being to enable the system provides and generates a request for a document, the request including the identity of the user, transmitting the request to the print server and receiving a document from the print server for printing the document for the user (col. 2, lines 54-67, Chan).

Regarding claims 2 and 19, all the limitations of these claims have been noted in the rejection of claims 1 and 16 above, respectively. In addition, Herz/Chan discloses: wherein the processor further stores a representation of the recorded item in the memory (col. 56, lines 60 to col. 57, lines 5, Herz).

Regarding claims 3 and 20, all the limitations of these claims have been noted in the rejection of claims 2 and 19 above, respectively. In addition, Herz/Chan discloses: wherein the representation is selected from the group consisting of a representation of the entire recorded item, a thumbnail image of the recorded item, a set of item attributes and a characterization of the recorded item's content (col. 65, lines 4-32, Herz).

Regarding claims 4 and 18, all the limitations of these claims have been noted in the rejection of claims 1 and 16 above, respectively. In addition, Herz/Chan discloses: wherein the

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memory stores user profiles for users of the system (col. 57, lines 18-20, Herz), wherein each user profile includes a set of user preferences pertaining to items and wherein the processor, responsive to the user request, updates the user's profile with the implicit rating (col. 57, lines 20-36, Herz), updates the user's profile with the implicit rating (col. 56, lines 4-12, Herz) .

Regarding claims 5 and 21, all the limitations of these claims have been noted in the rejection of claims 4 and 18 above, respectively. In addition, Herz/Chan discloses: wherein the processor further stores a representation of the recorded item in memory and determines an item similarity for the recorded item (col. 57, lines 51 to col. 58, lines 10, Herz).

Regarding claims 6 and 22, all the limitations of these claims have been noted in the rejection of claims 5 and 21 above, respectively. In addition, Herz/Chan discloses: wherein the item similarity comprises an item to item similarity is determined by comparing the stored representation of the recorded item with the stored representations of other recorded items stored in the memory (col. 69, lines 45 and after, Herz).

Regarding claims 7 and 23, all the limitations of these claims have been noted in the rejection of claims 5 and 21 above, respectively. In addition, Herz/Chan discloses: wherein the item similarity comprises an item to user similarity which is determined by comparing the stored representations of the user's recorded items with the stored representations of other recorded items stored in the memory (col. 55, lines 43-65 and after, Herz).

Regarding claims 8 and 24, all the limitations of these claims have been noted in the rejection of claims 4 and 18 above, respectively. In addition, Herz/Chan discloses: wherein the processor determines a user to user similarity for the user by comparing the user's profile with the other user profiles stored in the memory (col. 55, lines 65 to col. 56, lines 13, Herz).

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Regarding claims 9 and 26, all the limitations of these claims have been noted in the rejection of claims 4 and 18 above, respectively. In addition, Herz/Chan discloses: wherein the processor updates the user's profile by determining how often the user records items having a similar item similarity and further stores the updated user profile in the memory (col. 56, lines 4-12, Herz).

Regarding claims 13 and 28, all the limitations of these claims have been noted in the rejection of claims 4 and 18 above, respectively. In addition, Herz/Chan discloses: wherein the processor determines an action based user similarity by correlating the number of user implicit ratings in the user's profile to the total number of recorded item implicit ratings stored in the memory (col. 50, lines 15-41, Herz).

As per claim 30, all the limitations of this claim have been noted in the rejection of claim 1. It is therefore rejected as set forth above. In addition, Herz/Chan discloses: a knowledge management service located on a distributed network remote from the device for providing services associated with items in the system (col. 20, lines 46 to col. 21, lines 6, Herz) comprising: generated and stores a record of the user request with the requested item in the repository and associated a service with the requested item (col. 28, lines 47 to col. 29, lines 41, Herz), and an input device for requesting services associated with items on the system (col. 29, lines 3-6, Herz).

Regarding claim 31, all the limitations of this claim have been noted in the rejection of claim 30. In addition, Herz/Chan discloses: wherein the device comprises a printer and the device (210, fig. 2 and corresponding text, Chan) and the input device (220, fig. 2 and

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corresponding text, Chan) are connected to the knowledge management service via the Internet (250, fig. 2 and corresponding text, Chan).

Regarding claim 32, all the limitations of this claim have been noted in the rejection of claim 30. In addition, Herz/Chan discloses: wherein the services associated with items comprise content extraction (col. 51, lines 50-67, Herz) and indexing (col. 56, lines 30-49, Herz) .

Regarding claim 33, all the limitations of this claim have been noted in the rejection of claim 30. In addition, Herz/Chan discloses: wherein the services comprise recommendations (col. 61, lines 23-55, Herz).

As per claim 35, all the limitations of this claim have been noted in the rejection of claims 1 and 30. It is therefore rejected as set forth above.

Regarding claim 36, all the limitations of this claim have been noted in the rejection of claim 35. In addition, Herz/Chan discloses: wherein the recommender service further stores user profiles for use in generating recommendations (col. 61, lines 23-55, Herz).

**4. Claim 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. (U.S 5754939) (Herz) in view of Chan et al. (U.S 6378070) (Chan) and further in view of Johnson et al. (U.S 5664109) (Johnson).**

Regarding claim 11, all the limitations of this claim have been noted in the rejection of claim 4 above. However, Herz/Chan didn't disclose: wherein the processor, responsive to the user's request, stores a record of a user ID, a record of an item ID and a time stamp. On the other hand, Johnson discloses: wherein the processor, responsive to the user's request, stores a record of a user ID, a record of an item ID and a time stamp (col. 13, lines 17-27, Johnson). Thus, at the

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time invention was made, it would have been obvious to a person of ordinary skill in the art to include the processor, responsive to the user's request, stores a record of a user ID, a record of an item ID and a time stamp in the combination system of Herz/Chan as taught by Johnson. The motivation being to enable the system records documents that includes fields for a master document identifier, receipt date/time and a unique file identifier, data values for these fields are assigned to the document by the server network (col. 13, lines 17-27, Johnson).

**5. Claims 15, 17 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. (U.S 5754939) (Herz) in view of Chan et al. (U.S 6378070) (Chan) and further in view of Boorom et al. (U.S 6578167) (Boorom).**

Regarding claims 15 and 34, all the limitations of these claims have been noted in the rejection of claims 1 and 30 above, respectively. However, Herz/Chan didn't disclose: wherein the device is selected from the group consisting of a printer, a copier, a scanner and a multi-function device for printing, scanning and copying. On the other hand, Boorom discloses: wherein the device is selected from the group consisting of a printer, a copier, a scanner and a multi-function device for printing, scanning and copying. (Col.4, lines 66 to col. 5, lines 12, Boorom). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the recording is selected from the functions of printing, scanning and copying in the combination system of Herz/Chan as taught by Boorom. The motivation being to enable the system provides the digital devices for controlling the documents printing, scanning and copying col.4, lines 66 to col. 5, lines 12, Boorom).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 16 above. In addition, Herz/Chan/ Boorom discloses: wherein the recording is selected



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from the functions of printing, scanning and copying (col. 4, lines 66 to col. 5, lines 12, Boorom).

**6. Allowable Subject Matter**

Claims 10, 12, 25 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record and that encountered while searching for the claimed invention fails to anticipate and/or suggest: a system and method for providing item recommendations, comprising: processor characterizes content of the recorded item using linguistic tools and wherein the processor determines the item to item similarity between two recorded items by calculating a sum of weights of keywords in common divided by a sum of weights of all keywords associated with the two recorded items as recited in claims 10 and 25.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record and that encountered while searching for the claimed invention fails to anticipate and/or suggest: a system and method for providing item recommendations, comprising: the processor characterizes content of the recorded item using linguistic tools and wherein the processor generates a historical linguistic user profile for each user comprising a list of terms extracted from user recorded items and frequency of occurrence of such extracted terms and wherein the processor generates a current linguistic user profile for each user comprising a list of terms extracted from user recorded items with terms being weighted by a damping

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coefficient,  $e^{-\alpha t}$ , where  $t$ =today--timestamp of association of the recorded item with the user and  $\alpha$  is a damping coefficient as recited in claims 12 and 27.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record and that encountered while searching for the claimed invention fails to anticipate and/or suggest: a system and method for providing item recommendations, comprising: the processor characterizes content of the recorded item using linguistic tools, wherein the processor generates a linguistic user profile for each user comprising a list of terms extracted from user recorded items and frequency of occurrence of such extracted terms, and wherein the processor determines an overlap between a user's linguistic profile and a recorded item's linguistic content characterization as recited in claims 14 and 29.

## **7. Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bobrow et al. (U.S 6562077). Sorting image segments into clusters based on a distance measurement.

Adler et al. (U.S 6651218). Dynamic content database for multiple document genres.

Adler et al. (U.S 6675356). Distributed document-based calendaring system.

Pedersen et al. (U.S 5483650). Method of constant interaction time clustering applied to document browsing.

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**8. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*CN*

Cindy Nguyen  
January 20, 2004

*Wayne*

WAYNE AMSBURY  
PRIMARY PATENT EXAMINER